Superfund Redevelopment Initiative

SITE REDEVELOPMENT PROFILE

Henry's Knob Superfund Alternative Site

Clover, South Carolina

Ecological revitalization project on site after installation and seeding. (*Source:* EPA)

Site Location: State Highway 55 and Henry Knob Road, Clover, South Carolina 29710

Size: 185 acres

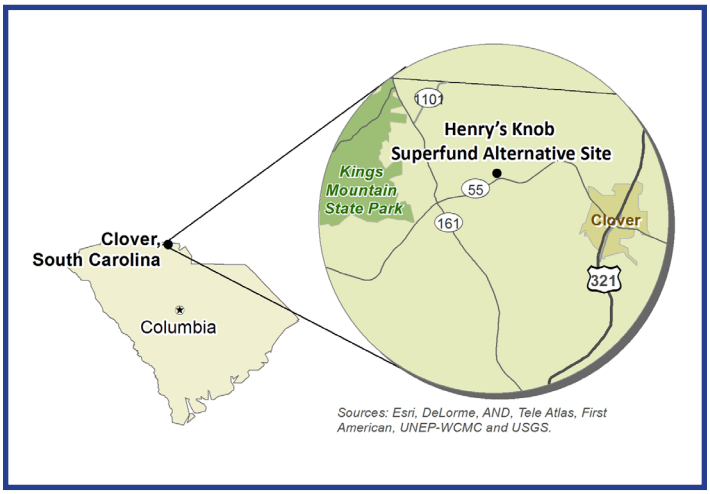
Current Site Uses: Ecological restoration is underway. Native vegetation and pollinator habitat are well established on site.

Surrounding Population: 5,094 people live in Clover (2010 Census).

An innovative remedy at this former mine site is protecting public health and the environment while also serving as vital native habitat for pollinators and other species. ABB, Inc., the site's responsible party, worked with EPA and the South Carolina Department of Health and Environmental Control (SCDHEC) to make it possible.

A kyanite mine operated at the site from the 1940s through the 1970s. Kyanite is a mineral used in production of refractory, ceramic and porcelain materials that withstand high temperatures. After the mine's closure, about 1.4 million cubic yards of mine tailings were left behind. If these tailings come in contact with rainfall, they can release contaminants into the groundwater.

The site is being cleaned up using the Superfund Alternative Approach (see Spotlight section on page 2). Project parties developed a soil amendment and placed it over the tailings to produce a thick vegetative layer to aid in adsorption of precipitation. EPA and SCDHEC also helped the responsible party select a seed mix that would support pollinators. Native vegetation and pollinator habitat are now well established on site.



Location of the site in Clover, South Carolina.

SITE HISTORY AND REDEVELOPMENT TIMELINE

1947 - 1970 Kyanite mine is active at the site; operations leave behind tailings waste that can contaminate groundwater.

2004 EPA and the responsible party enter an agreement to evaluate site conditions and cleanup options.

2011 Responsible party completes risk assessments and evaluation of site conditions.

September 2012 EPA conducts sitewide removal at the site; additional cleanup is ongoing.

Late 2016 The responsible party completes the vegetative cover and plants pollinator seed mixes on part of the site.

Project after installation and before seeding. (*Source:* EPA)

"Hundreds of acres of mine tailings were located in several ponds around the site. We considered several options to address them. Developing this solution, the soil amendment approach, was the result of the responsible party working with us and SCDHEC. It is working well for all of the tailings ponds, the ponds will all be vegetated by mid-2017."

– Jeffery Crowley, EPA project manager

This effort illustrates how Superfund cleanup projects can integrate remedy and reuse considerations as part of innovative remedies that address multiple needs and priorities. It also shows how responsible parties can work with regulatory agencies on effective cleanups that protect public health and the environment.

Spotlight: The Superfund Alternative Approach

This EPA approach uses the same investigation and cleanup process and standards used for sites on the Superfund program's National Priorities List. The approach is an alternative to listing a site; it is not an alternative to Superfund or the Superfund process. It can potentially save the time and resources associated with listing a site on the National Priorities List.

Project after installation, seeding and revegetation. (*Source:* EPA)

FOR MORE INFORMATION

Melissa Friedland | (703) 603-8864
friedland.melissa@epa.gov

Frank Avvisato | (703) 603-8949
avvisato.frank@epa.gov

Bill Denman | (404) 562-8939
denman.bill@epa.gov